

## AMENDMENT

### In The Specification

Original paragraphs [0038] and [0044] are hereby replaced by means of replacement paragraphs.

Please replace original paragraph [0038] as follows:

-- [0038] In the foregoing description, backflushing may be achieved by pressurising both the inlet side 12a and the outlet side 12b of the cooling device 12, and opening the third valve V3 to vent the fluid from the inlet side 12a. Opening the third valve V3 while keeping the fourth valve V4 closed may generate an at least momentary flow of a quantity of pressurized fluid from the outlet side 12b through the orifice 14 to the inlet side 12a, thereby backflushing fluid through the orifice. The backflushing may generate an abrupt pressure burst or pressure wave across the orifice, which is extremely effective in clearing foreign matter from the orifice 14. The magnitude of a backflush pressure differential across the orifice may be at least, or greater than, any of: 300 psi, 350 psi, 400 psi, 450 psi, 500 psi, 550 psi, 600 psi, 650 psi, 700 psi, 750 psi, 800 psi, or 850 psi. As an alternative to a momentary flow, a separate back-flush valve ~~V9~~ may be coupled from the fluid supply node 16 to the second coupling port 18b. The back flush valve ~~V9~~ may be operated to provide a continuous flow of high pressure fluid to the outlet side 12b of the cooling device, for continuous backflushing through the orifice 14. --

Please replace original paragraph [0044] as follows:

-- [0044] The ~~first to eighth (or ninth)~~ valves ~~V1-V8 (and V9)~~ may be electrically operated valves such as. ~~The valves may, for example, be~~ solenoid operated valves. The first valve V1 may be configured to have a variable aperture, to provide a variable flow control between a fully

open condition and a fully closed condition. For example, the first valve V1 may be a variable servo controlled valve. Alternatively, the first valve V1 may be of a type intended to be driven by a modulated signal for controlling the first valve V1 according to a degree of modulation. For example, referring to FIG. 10, the first control signal VCS1 may be a pulse modulated signal. The pulse modulated signal may be a pulse width modulated (PWM) signal. The degree of opening of the first valve V1 may be controlled by a duty ratio of the PWM signal. FIG. 10a may illustrate a first example of the control signal VCS1 having a high duty ratio of on-time:off-time, for controlling the first valve V1 to have a large aperture (e.g., almost completely open). FIG. 10b may illustrate a second example of the control signal VCS1 having an approximately 50% duty ratio of on-time:off-time, for controlling the first valve V1 to have a medium aperture (e.g. approximately half-way open). FIG. 10c may illustrate a third example of the control signal VCS1 having a small duty ratio of on-time:off-time, for controlling the first valve V1 to have a small aperture (e.g., almost closed). The control unit 26 may control the duty ratio of the first control signal VCS1 to be substantially continuously variable, or to have a predetermined number of quantized values. The frequency of the first control signal VCS1 may be between 100 Hz and 1000 Hz. Depending on the frequency, a shutter (not shown) of the first valve V1 may either physically oscillate between the fully open and closed states in accordance with each pulse of the control signal VCS1, or the shutter may effectively hover between the fully open and closed states, at a mean position determined by the duty ratio of the control signal VCS1. A pulsed valve may be any of less expensive, more reliable, and/or more durable than an equivalent servo driven valve. --